ABSTRACT

A snapshot tree structure includes a base volume storing a current user data, a first snapshot descending from the base volume, and a second snapshot descending from the first snapshot, wherein the second snapshot was created prior to the first snapshot. The first snapshot includes a first table corresponding to first portions of block addresses, a second table corresponding to second portions of the block addresses, and a third table to third portions of the block addresses. The first table includes an entry with a pointer to the second table. The second table includes an entry with a pointer to the third table. The third table includes an entry with a pointer to a data of the base volume before the data is modified in the base volume.